



Authorizations and Permits for Protected Species (APPS)

File #: 14451

Title: Assessing distribution and abundance of marin

Modification: 4

Applicant Information

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Project Information

File Number: 14451

Application Status: **Application Complete**

Project Title: Assessing distribution and abundance of marine mammals on Navy operational areaa, instrumented ranges and adjacent waters using surface vessel surveys, photo identification, videography, and acoustic recording

Project Status: Renewal

Previous Federal or State Permit: 642-1536-01

Permit Requested:

- MMPA/ESA Research/Enhancement permit

Where will activities occur? California (including offshore waters)
US Locations including offshore waters
Oregon (including Columbia River and offshore waters)
Washington (including Columbia River and offshore waters)

Research Timeframe: **Start:** 07/14/2010 **End:** 07/31/2015

Sampling	- Migratory mysticete whale season in the tropics and sub-tropics (Hawaii, southern U.S. east coast, southern California, Gulf of Mexico/Caribbean) is January through May over 5 seasons.
Season/Project	- Migratory mysticete whale season in the high latitudes (Alaska, New England) is June through December over 5 seasons.
Duration:	- Other cetacean species throughout the year as weather and funding permit over 5 years.
Abstract:	Research will investigate long-term changes of the incidence, distribution and behavior of target species, particularly due to impact of anthropogenic sound. The target species are mysticete whales: Blue (<i>Balaenoptera musculus</i>), Fin (<i>Balaenoptera physalus</i>), Humpback (<i>Megaptera novaeangliae</i>), Sei (<i>Balaenoptera borealis</i>), Bryde's (<i>Balaenoptera edeni</i>), Gray (<i>Eschrichtius robustus</i>), Minke (<i>Balaenoptera acutorostrata</i>); odontocete whales: Sperm (<i>Physeter macrocephalus</i>), Killer (<i>Orcinus orca</i>), Short-finned Pilot (<i>Globicephala macrorhynchus</i>), Melon-headed (<i>Peponocephala electra</i>), False Killer (<i>Pseudorca crassidens</i>), Pygmy Killer (<i>Feresa attenuata</i>), Dwarf Sperm (<i>Kogia sima</i>), Pygmy Sperm (<i>Kogia breviceps</i>), Northern Bottlenose (<i>Hyperoodon ampullatus</i>); dolphins: Risso's (<i>Grampus griseus</i>), Short-beaked Common (<i>Delphinus delphis</i>), Long-beaked Common (<i>Delphinus capensis</i>), Pacific White-Sided (<i>Lagenorhynchus obliquidens</i>), Rough-Toothed (<i>Steno bredanensis</i>), Striped (<i>Stenella coeruleoalba</i>), Pantropical Spotted (<i>Stenella attenuata</i>), Spinner (<i>Stenella longirostris</i>), Bottlenose (<i>Tursiops truncatus</i>), Fraser's (<i>Lagenodelphis hosei</i>), Atlantic White-Sided (<i>Lagenorhynchus obliquidens</i>), Atlantic Spotted (<i>Stenella frontalis</i>), Clymene (<i>Stenella clymene</i>); beaked whales: Blainville's (<i>Mesoplodon densirostris</i>), Cuvier's (<i>Ziphius cavirostris</i>), Baird's (<i>Berardius bairdii</i>), Longman's (<i>Indopacetus pacificus</i>), Gervais' (<i>Mesoplodon europaeus</i>), and Mesoplodont (<i>Mesoplodon</i> spp.) For all species, research techniques include aerial and vessel surveys, photo-identification, videography, and behavioral observation. For N. Pacific humpback whales research also includes having a swimmer perform in-water photography and videography. Research will be carried out annually over five years in U.S. waters: HI, AK, both coasts of the U.S., as well the Bahamas, Guam and the Marianas.

Project Description

Purpose:	The objective of the research is to investigate short- and long-term changes in population size, habitat use, and behavior of the marine mammal species in question, particularly with regard to the impact of anthropogenic sound in the ocean. Ocean noise has been linked to adverse effects on cetaceans in a broad and growing body of literature detailing impacts in a variety of instances, including strandings (Frantzis 1998, Fernandez et al. 2005), changes in behavior (Frankel and Clark 2000, National Marine Fisheries Service 2005), and changes in vocalizations (Miller 2000). The proposed research will include studies of both mysticetes and odontocetes. Of particular interest for investigation are: 1) the effects of mid-frequency active sonar on beaked whales, 2) beaked whale foraging behavior, 3) annual aerial and vessel surveys of cetacean species around the Hawaiian Islands to document ongoing population-level changes, especially for humpback whales, and 4) the effects of low-frequency active sonar on the behavior of baleen whales. All of these factors can affect the health of cetacean individuals and the effort will be made to explore how they can impact the health of cetacean populations. It may be useful to compare findings from stocks of the same species in the different oceans, so the project will investigate populations from the Pacific as well as the Atlantic. This large sample size will provide robust results.
Description:	Animals will be taken over the five-year life of the permit and takes may vary from year to year. Each animal may be taken more than once in a day but in a different manner, i.e., an individual may be photographed from both aerial and surface vessel platforms. Up to three close approaches may occur per animal per day over each season. All observational research will be based from research surface vessel and/or an aircraft. The photographs and video taken from these platforms will enable identification of individual animals for tracking their health over time (Constantine et al. 2007), to describe population distribution (Baird et al. 2009), and document behavior (Craig and Herman 2000). These data also facilitate comparisons of behavior of individuals during past or future military activities and other studies. As the research involves a comprehensive list of species, it is not expected that non-target cetacean species will often be encountered. If non-target species are encountered, they will be avoided, especially in the case of critically endangered species such as the Hawaiian monk seal or North Atlantic right whale. There will be no import or export activity. There will be no tagging or biopsy procedures.

Aircraft-based research:

Aerial surveys will be conducted for the purpose of monitoring military activities including but not limited to antisubmarine warfare (ASW) exercises, the use of active sonars, underwater detonations, live fire exercises, and other surface and submarine ship activities, under the U.S. Navy's election to consolidate ESA and MMPA compliance efforts under a recent "indefinite delivery, indefinite quantity" (IDIQ) request for quotes (RFQ) (see attached). In some cases these surveys will be coordinated with ship-based surveys in the same waters. Therefore the same animal may be observed by the two platforms in the course of one day, but very likely will not be observed more than three times in one day. The expected hours of aerial surveying per year under the IDIQ RFQ are listed in attached files for each take region and range from 40 to 500 hrs/yr; the work day will be approximately an 8 hour day.

The survey aircraft may be either fixed-wing or rotary-wing. For example we have used twin-engine high fixed-wing craft such as the Partenavia Observer (P68) and Aerocommander, as well as a Robinson 44 helicopter (e.g., Mobley, 2005; Mobley et al., 2009). Aerial surveys will be conducted at a speed of ~185 km/hr (~100 kt) and an altitude of ~244 m (800 ft), with the option of: 1) descending to ~152m (500 ft) only if required for

species identification, or 2) flying at alternate altitudes when the pilot is directed to do so by flight controllers for safety reasons. Crew will consist of a pilot and co-pilot, in addition to two experienced observers stationed on each side of the aircraft. There may be additional crew such as a dedicated data recorder or photographer-videographer. Photographic activities will use a digital camera with telephoto zoom lens. Location data from a global positioning system (GPS) receiver are recorded automatically at 30-sec intervals, as well as whenever an animal sighting or other observation (such as a change in environmental or experimental conditions) is made. Suunto clinometers will be used to obtain declination angles of sightings when the sighting becomes perpendicular to the aircraft using standard line-transect methodology (e.g., Buckland et al., 2001). Other data recorded include environmental parameters including Beaufort sea state (Bf), glare, and visibility, taken at the onset of each survey leg, or when these conditions change, as well as information on experimental effort type (e.g., Mobley 2008a; Mobley 2008b; Mobley et al. 2000; Smultea and Mobley 2009; Smultea et al., 2008; Smultea et al., 2009). When a sighting occurs, the declination angle to the sighting is called out by the observer, as well as species identity (if readily identifiable), group size and composition (including the presence or absence of calves), general behavior, and any observed potential reactions (defined as a change in heading or behavior or a behavior deemed unusual by the experienced observers). Following the initial sighting, the aircraft may break from the transect line in order to orbit the sighting to confirm species identification, obtain more detailed behavioral observations, and to perform photography or videography. In some cases the resulting photography will be used for species identification when doing so by visual inspection alone is not possible. In general a maximum of three to four orbits are generally necessary for species ID and photography purposes. For sightings of single animals or compact groups, the animal is generally visible for only a fraction of the orbit; the orbit does not pass directly over the animal, as a path with a more lateral view is ideal for a better viewpoint for photography as well as being less likely to change the animal(s)' behavior. Each total orbit is typically ~2-3 min in duration.

In addition to a traditional line transect methodology, we may follow other search protocols when monitoring military activities, such as following surface ships, or monitoring other military test or exercise activities such as detonations or launches (e.g., Mobley et al., 2009). In a "ship follow" protocol, the survey aircraft will begin in a "search mode" by shadowing the progress of a surface ship by flying elliptical orbits in front of the ship, alternately to both its starboard and port sides while searching for sightings. When a sighting was made, a change may be made to "focal follow" mode, where the aircraft would break from its search pattern in order to orbit the sighting to obtain detailed behavioral observations for as long as the sighting is visible and trackable. Protocols with respect to observations and data recording (i.e., declination angle, environmental variables, behavioral observation, photography, videography, and GPS logging) will be the same as for our aerial line transect surveys. Radio communication with the surface craft will be maintained via an aviation-band VHF radio, and will be used to inform the surface craft of the beginning or ending of the aerial search, and in the event of a sighting. Observations for the monitoring of other types of military activities will be designed to effectively cover the study area, for example a shoreline-following survey to search for beached animals, or a set of narrowly-spaced survey lines near an underwater detonation, also with the option of breaking the search mode in order to enter the focal follow mode for more detailed observations (e.g., Mobley et al., 2009).

Boat-based research:

Boat-based surveys will be conducted for the purpose of monitoring military activities including but not limited to antisubmarine warfare (ASW) exercises, underwater detonations, live ordnance exercises, and other surface and below-surface ship activities, under the U.S. Navy's election to consolidate ESA and MMPA compliance efforts under a recent "indefinite delivery, indefinite quantity" (IDIQ) request for quotes (RFQ) (see attached). In some cases these surveys will be coordinated with aerial surveys in the same waters. Therefore the same animal may be observed by the two platforms in the course of one day, but very likely will not be observed more than three times in one day. The expected hours of aerial surveying per year under the IDIQ RFQ are listed in attached files for each take region and range from 15 to 95 hrs/yr; the work day will be approximately an 8 hour day.

Survey research from surface ships will follow a line transect protocol or a focal behavioral observation protocol for focal behavioral observations and photography.

Boat-based line transect: In a line transect protocol, the size of the research vessel will typically be up to ~30m (~98.4 ft), and it will be equipped with various means of communication with other vessels, aircraft, and shore, including vessel-to-vessel VHF marine radios, an IMMARSET satellite phone, and cellular phones. For example we have previously chartered the 29.2m (96 ft) RV the Searcher (Smultea, 2008). However if required by the contract or availability, larger vessels may be utilized. For example Barlow and Forney (2007) used 52m, 53m, and 62m vessels for similar surveys. Experienced visual observers will maintain a visual watch from the flying bridge or observation platform during daylight hours during "acceptable" survey conditions (i.e., Bf <7 with no rain or other environmental conditions impeding the ability to sight marine mammals). The ship will travel at 16.7-18.5 km/hr (9-10 kt) while on survey effort. During inclement conditions (e.g., Bf 6 with large swell), one or two observers will watch until conditions are deemed unsafe. Observational effort will consist of either "survey" or "focal" effort. During survey effort, the ship follows a predetermined grid of transect lines following traditional distance sampling methods (Buckland et al., 2001). The prevalent weather conditions (e.g., large swells, high winds, wind direction, strong sun glare) may necessitate modification of the survey lines for improved sighting effectiveness, or by consultation with the vessel Captain regarding operational safety. The ship may also deviate from the predetermined lines in order to: 1) conduct focal animal follows, 2) remain within view of but avoid close encounters with military observations, 3) relocate due to military operations via radio communications, or 4) transit to and from lines between protected nighttime anchorages. During survey watches, observers will use either the naked eye, hand-held binoculars, or "Big Eye" (e.g., 25x50) pedestal-mounted binoculars. Two observers (using "Big Eye" binoculars if available) will scan waters from approximately 090 degrees left or right of the bow to ten degrees right or left of 0 degrees, respectively. A third observer functions as a recorder and also scans the water, both with naked eye or with hand-held binoculars, from 090 left to 090 right, as well as close to the vessel. Observers generally rotate watch positions every 30 min to reduce observer fatigue. A handheld GPS is used to determine latitude and longitude, which is recorded at 30-sec intervals on a data-logging software program such as WinCruz, a marine mammal line-transect program developed by NOAA Fisheries' Southwest Fisheries Science Center [SWFSC], at La Jolla, CA (for more information see: <http://www.swfsc.nmfs.noaa.gov/PRD/software/WinCruz.pdf>). Other observational information such as sighting details and environmental conditions are also recorded. Sighting data will include estimated distance and horizontal bearing to the sighting, time, species identification, estimated group size (best, high, and low estimates), number

of calves, other species associations, sighting cue, and heading/orientation relative to the vessel. A modified scan sampling protocol (Altman, 1974; Smultea, 1994) may also be used to collect behavioral information such as behavioral state, conspicuous individual behaviors (particularly any observed reactions or unusual behavior), and estimated speed of movement. Environmental conditions (weather, swell height, Beaufort wind force (sea state), and visibility conditions), and effort variables (observer positions and effort type) are also recorded every watch change and when the conditions change. If applicable, the number of military vessels within view (including over the horizon) are also recorded.

Boat-based focal behavior observations: Upon locating a cetacean species during a line transect, the survey leader will assess whether conditions are suitable to break off survey effort to conduct an focal session to confirm species identification, group size, or to obtain detailed behavioral information (i.e., "focal effort"). In particular, care will be taken not to approach the same animal more than three times in one day (including aerial observations). Focal effort will involve following and monitoring a group of animals using the naked eye, Big Eyes (if available), and hand-held binoculars, as appropriate, to observe and record behavior. In general focal behavior sessions last for ~12-25 minutes, with the exception of waiting for deep-diving species to reappear and resurface for species identification. The following information will be recorded and updated for each focal effort session: group size and composition, start and end times, observer initials and positions, photographs and video taken, environmental conditions, and if applicable the number of military vessels within view. Scan-sampling and zero-one sampling approaches (Altman 1974; Shane 1990; Smultea 1994; Mann 2000) will be used to record the following behavioral information on the focal group at 1-2 min intervals as possible: 1) behavior state (travel, surface-active travel, milling, surface-active milling, and resting), 2) occurrence or non-occurrence and type of "conspicuous" individual behaviors (e.g., individual non-respiratory and typical splash-creating behaviors including breaches, tail slaps, head rises, spinning, bowriding, porpoising, etc.), 3) estimated speed of travel, 4) distance and bearing relative to vessel, 5) number of individuals bowriding, and 6) minimum and maximum spacing between individuals within the subgroup closest to the vessel. Digital photographs and videos will be made for photo identification, species verification, and detailed behavior documentation. During focal effort, one observer will function as the primary behavioral observer. A second observer will serve as the data recorder to complete behavioral observations by hand (for later computer entry). The third and fourth observers function as photographer, and videographer, respectively. A fifth observer may function as a generalist observer, assisting in locating animals and assisting in calling behaviors, photography, and directing the vessel captain how to position the vessel relative to the sighting.

The boat may also be directed to break the survey line to begin a focal effort if directed to do so by observers on other platforms, such as the aerial survey craft, in the case that they observe conspicuous individual behaviors (during the monitoring of military activities) judged significant enough for closer examination by the boat.

Small boat-based research:

Research vessels ~3 m - 30 m (~9.8 ft - ~ 98.4 ft) in length will be used for opportunistic behavioral observation research that does not follow a line transect survey protocol and is not directly related to the monitoring of military activities. This research will not be coordinated with aerial surveys.

Based upon study area and real-time VHF radio communication with other vessel operators, the boat will travel in the study area scanning for marine mammal sightings. Four observers will be responsible for each of the scanning quadrants: bow, stern, starboard, port. Once a sighting is observed, the survey leader will assess whether conditions are suitable to break off survey effort to conduct an focal session to confirm species identification, group size, obtain photography for individual identification, and to obtain detailed behavioral information. In particular, care will be taken not to approach the same animal more than three times in one day. Focal session protocols will largely follow those described previously for "boat-based focal behavior observations", including those described for recording behaviors, group composition, and vessel location. Differences include: 1) Binoculars may be used less often due to the decreased distance to horizon on generally smaller vessels, 2) a greater emphasis will be placed on obtaining ideal photographs for individual identification, 3) a hydrophone may be deployed when the vessel is stationary, for example to record humpback whale vocalizations and song, and 4) a swimmer functioning as an underwater videographer or photographer (utilizing snorkeling gear and an underwater camera housing) may be deployed. Maneuvering the boat to obtain a range and orientation to the animals that is ideal for photographs for individual identification may involve closer approaches than the "focal behavior" mode of the "line transect" method with a larger vessel. No individual animal will be intentionally approached in such a manner more than three times in one day; occasionally approaches to an individual twice in one day may occur at different times of the day if the animal has moved. In the case of species for which fluke photographs are used for individual identification (e.g., humpback whale [Megaptera novaeangliae], sperm whale [Physeter macrocephalus]), the boat will be maneuvered directly behind the animal's estimated path of travel so as to be in an ideal position and range for photography of the ventral surface of the fluke when the animal resurfaces. In the case of species for which dorsal photographs are used for individual identification (e.g., bottlenosed dolphin [Tursiops truncatus], spinner dolphin [Stenella longirostris]), the boat will be maneuvered into an ideal range and position estimated to be directly lateral to the animals when they next surface. In addition, two observers will be dedicated to the role of still photographer. Only specific experienced observers will be designated as underwater photographers.

Status of Species:	PLEASE SEE ATTACHED FILE: STATUS OF POTENTIALLY AFFECTED SPECIES BY GEOGRAPHIC LOCATION.
	DATA FOR THE STATUS OF EACH SPECIES WERE TAKEN DIRECTLY AND SYNTHESIZED FROM THE 2008 NOAA ATLANTIC, PACIFIC, AND ALASKA STOCK ASSESSMENT REPORTS
	http://www.nmfs.noaa.gov/pr/sars/region.htm http://www.nefsc.noaa.gov/publications/tm/tm210/ http://www.nmfs.noaa.gov/pr/pdfs/sars/po2008.pdf http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2008.pdf
Lethal Take:	Not Applicable
Anticipated Effects on Animals:	Takes for all species are detailed in the "Locations/Take" section of this application. Behavioral and photo-identification: Behavioral and photo-identification research may involve takes by Level B Harassment. Behavior of individuals may be unintentionally disrupted more than once in a day and in a season, but not more than three times in one day. No animal will be intentionally taken more than one time from each platform (aircraft or surface vessel). The photography and videography results can be used to identify individuals (Constantine et al. 2007), describe population distribution (Baird et al. 2009), and document behavior (Craig and Herman 2000). The photography and videography may be from different platforms, such as a surface vessel, by an in-water swimmer deployed from the surface vessel, or airplane. The applicant has attempted to consider all possible species that may be unintentionally harassed during any given operation. Effects on the target animals may include temporarily separating animal(s) from their group by boat maneuvering.
Measures to Minimize Effects to Listed Species:	Behavioral monitoring and photo-identification: Every effort will be made not to separate animal(s) from their group by vessel maneuvering. The use of telephoto lenses and binoculars may be able to ensure quality photographs and video from a distance which does not impact the animals. Animals will be monitored at all times and if an animal or animals appear to be in serious distress, the operation will be halted. With regard to shoreline-following aerial surveys, in areas of Hawaiian waters where Hawaiian monk seals (<i>Monachus schauinslandi</i>) could potentially be hauled out, the aircraft would fly at least 100 yds (91.4m) away from shorelines at an altitude of at least 1000 ft (244m) to avoid harassment.
Resources Needed to Accomplish Objectives:	All investigators have experience in marine mammal research. The principal investigator is a professor at the University of Hawai'i and has a long professional history of research and publication. He has access to research vessels and aircraft. Co-investigators Reeve and Deakos are also affiliated with the University of Hawaii and have access to UH facilities. Co-investigator Smultea is Director of the private firm, Smultea Environmental Sciences, and Co-investigator Mazzuca is a Natural Marine Resources Management Specialist with the U.S. Navy.
Disposition of Tissues:	NO TISSUE SAMPLES WILL BE TAKEN
Public Availability of Product/Publications:	All findings will be published in peer-reviewed journals available publicly.

Captive Information

(a) If applicable, explain why removal from the wild is necessary and why suitable animal(s) cannot be obtained from captive or rehabilitated stock.
NO CAPTIVES WILL BE TAKEN.

(b) For any transport to and/or from a holding/captive/rehabilitative facility, provide a description of the enclosure or cage to be used for containment and transport, mode of transportation, special care during transport, and the length of time required for the transfer from the capture site to the initial holding facility, and then to the permanent holding facility. Provide a list of personnel who will be involved in and/or accompanying the animals during transport and their qualifications, and whether a veterinarian will be present.

(c) If the source stock is to be beached/stranded marine mammals undergoing rehabilitation, indicate the name and location of the rehabilitation facility.
NO CAPTIVES WILL BE TAKEN; No source stock of beached/stranded marine mammals undergoing rehabilitation will be used.

(d) If the source stock is from marine mammals or endangered species already in captivity (other than beached/stranded animals) indicate the name and location of the facility, and identify the specific animals (by NOAA ID number where applicable) involved in the proposed activity.
NO CAPTIVES WILL BE TAKEN; No source stock of marine mammals or endangered species already in captivity will be used.

(e) Where applicable, include a copy of any license or registration issued by the Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture, and any outstanding variances granted by APHIS, and the most recent APHIS inspection report.

0 files attached.

(f) Where applicable, include the proposal submitted to the appropriate Institutional Animal Care and Use Committee (IACUC) established under the AWA, the IACUC approval, and any comments and recommendations of the IACUC.

0 files attached.

(g) Provide a written statement from the responsible veterinarian or expert certifying that the facilities, methods of care and maintenance, and methods of transport will be adequate to ensure the well-being of the animals and, where applicable, comply with all care and transport standards established under the AWA.

0 files attached.

(h) Describe the care and maintenance of the animals, including a complete description of the facilities where they will be maintained.

NO CAPTIVES WILL BE TAKEN; Animals will not be maintained in a facility.

(i) Indicate whether a captive breeding program will be established and if so, provide justification in accordance with the species conservation or recovery plan, if applicable. For non-mammal ESA-species, indicate if you are willing to participate in a captive breeding program if requested by NMFS.

NO CAPTIVES WILL BE TAKEN; No breeding program will be established.

(j) Indicate the disposition of captive animals at the termination of research or enhancement activities.

NO CAPTIVES WILL BE TAKEN.

(k) If release of captive animals to the wild is proposed, state the length of time the animals will be held and describe the protocols for the release, including post-release monitoring protocols.

NO CAPTIVES WILL BE TAKEN.

Location/Take Information

Location

Research Area: Pacific Ocean State: HI Stream Name: NORTH PACIFIC OCEAN OFFSHORE HAWAIIAN ISLANDS

Sale in Oregon of species taken: None

Location Description: Federal and state waters around the main Hawaiian Islands and Northwest Hawaiian Islands, including the Hawaiian Islands Humpback Whale National Marine Sanctuary and Papahanaumokuakea Marine National Monument, and waters of and adjacent to US Navy PMRF

Take Information

Line	Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Takes Per Animal	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date
1		Dolphin, bottlenose	Hawaiian Stock	Wild	All	Male and Female	345	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015

2	Dolphin, common, short-beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
3	Dolphin, Fraser's	Range-wide	Wild	All	Male and Female	865	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
4	Dolphin, pantropical spotted	Range-wide	Wild	All	Male and Female	710	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
5	Dolphin, Risso's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
6	Dolphin, rough-toothed	Range-wide	Wild	All	Male and Female	65	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
7	Dolphin, spinner	Hawaiian Stock	Wild	All	Male and Female	1270	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
8	Dolphin, striped	Range-wide	Wild	All	Male and Female	565	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
9	Dolphin, unidentified	NA	Wild	All	Male and Female	450	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
10	Whale, Baird's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
11	Whale, Blainville's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015

12	Whale, blue	Western North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
13	Whale, Bryde's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
14	Whale, Cuvier's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
15	Whale, dwarf sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
16	Whale, false killer	Range-wide	Wild	All	Male and Female	205	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
17	Whale, fin	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
19	Whale, humpback	Range-wide (NMFS Endangered)	Wild	All	Male and Female	5335	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
20	Whale, killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
21	Whale, Longman's beaked	Hawaiian Stock	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
22	Whale, melon-headed	Range-wide	Wild	All	Male and Female	535	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015

23	Whale, minke	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
24	Whale, pilot, short-finned	Range-wide	Wild	All	Male and Female	535	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
25	Whale, pygmy killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
26	Whale, pygmy sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
27	Whale, sei	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
28	Whale, sperm	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
29	Whale, unidentified baleen	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
30	Whale, unidentified beaked	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
31	Whale, unidentified Mesoplodon	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015
32	Whale, unidentified toothed	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Acoustic, passive recording; Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video; Underwater photo/videography	N/A	7/14/2010	7/31/2015

Location
Research Area: Atlantic Ocean **States:** AL,CT,DE,FL,GA,LA,MA,MD,ME,MS,NC,NH,NJ,NY,RI,SC,TX,VA **Stream Name:** NORTH ATLANTIC OCEAN OFFSHORE US WATERS
Sale in Oregon of species taken: None
Location Description: Federal and state waters off listed states including US Navy AUTECH, FACSFA (VACAPES and Jacksonville), and USWTR; and Cherry Pt., Narrangansett Bay, Virginia Capes, and Key West Complexes, as well as the AFAST study area

Take Information

Line Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Takes Per Animal	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date
1	Dolphin, Atlantic spotted	Range-wide	Wild	All	Male and Female	7030	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
2	Dolphin, Atlantic white-sided	Range-wide	Wild	All	Male and Female	13960	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
3	Dolphin, bottlenose	Range-wide	Wild	All	Male and Female	16540	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
5	Dolphin, clymene	Range-wide	Wild	All	Male and Female	670	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
6	Dolphin, common, short-beaked	Range-wide	Wild	All	Male and Female	23450	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
7	Dolphin, Fraser's	Range-wide	Wild	All	Male and Female	125	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
8	Dolphin, pantropical spotted	Range-wide	Wild	All	Male and Female	3055	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
9	Dolphin, Risso's	Range-wide	Wild	All	Male and Female	5430	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
10	Dolphin, rough-toothed	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
11	Dolphin, spinner	Range-wide	Wild	All	Male and Female	1035	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

12	Dolphin, striped	Range-wide	Wild	All	Male and Female	6595	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
13	Dolphin, unidentified	NA	Wild	All	Male and Female	1920	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
14	Dolphin, unidentified stenelline	NA	Wild	All	Male and Female	3055	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
15	Whale, Blainville's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
16	Whale, blue	Western North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	65	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
17	Whale, Bryde's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
18	Whale, Cuvier's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
19	Whale, dwarf sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
20	Whale, false killer	Range-wide	Wild	All	Male and Female	1500	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
21	Whale, fin	Range-wide (NMFS Endangered)	Wild	All	Male and Female	345	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
22	Whale, Gervais' beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
23	Whale, humpback	Western North Atlantic Stock (NMFS Endangered)	Wild	All	Male and Female	475	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
24	Whale, killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

25	Whale, melon-headed	Range-wide	Wild	All	Male and Female	475	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
26	Whale, Mesoplodon beaked	Western North Atlantic Stock	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
27	Whale, minke	Range-wide	Wild	All	Male and Female	65	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
28	Whale, northern bottlenose	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
29	Whale, pilot, long-finned	Range-wide	Wild	All	Male and Female	1080	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
30	Whale, pilot, short-finned	Range-wide	Wild	All	Male and Female	1130	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
31	Whale, pygmy killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
32	Whale, sei	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
33	Whale, Sowerby's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
34	Whale, sperm	Range-wide (NMFS Endangered)	Wild	All	Male and Female	495	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
35	Whale, True's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
36	Whale, unidentified baleen	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
37	Whale, unidentified beaked	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

38	Whale, unidentified Kogia (dwarf/pygmy sperm)	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
39	Whale, unidentified Mesoplodon	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
40	Whale, unidentified toothed	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

Location
Research Area: Pacific Ocean **States:** AK,CA,OR,WA **Stream Name:** NORTH PACIFIC OCEAN OFFSHORE NW UNITED STATES AND ALASKA
Sale in Oregon of species taken: None
Location Description: Waters offshore of Northern California, Oregon, Washington, and Alaska, including waters comprising and adjacent to US Navy's PACNORWEST OPAREA and the NWTRC, NAVSEA NUWC, and Gulf of Alaska complex.

Take Information

Line Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Takes Per Animal	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date
1	Dolphin, bottlenose	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
2	Dolphin, common, long-beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
3	Dolphin, common, short-beaked	Range-wide	Wild	All	Male and Female	3955	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A		
4	Dolphin, northern right whale	California/Oregon/Washington Stock	Wild	All	Male and Female	930	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
5	Dolphin, Pacific white-sided	Range-wide	Wild	All	Male and Female	1875	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
6	Dolphin, Risso's	Range-wide	Wild	All	Male and Female	425	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
7	Dolphin, rough-toothed	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

8	Dolphin, striped	Range-wide	Wild	All	Male and Female	75	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
9	Dolphin, unidentified	NA	Wild	All	Male and Female	100	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
10	Porpoise, Dall's	Range-wide	Wild	All	Male and Female	200	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
11	Whale, Baird's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
12	Whale, Blainville's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
13	Whale, blue	Eastern North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
14	Whale, Bryde's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
15	Whale, Cuvier's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
16	Whale, dwarf sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
17	Whale, false killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
18	Whale, fin	Range-wide (NMFS Endangered)	Wild	All	Male and Female	70	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
19	Whale, ginkgo-toothed beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
20	Whale, gray	Eastern North Pacific	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

21	Whale, Hubbs' beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
22	Whale, humpback	Range-wide (NMFS Endangered)	Wild	All	Male and Female	460	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
23	Whale, killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
24	Whale, Longman's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
25	Whale, melon-headed	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
26	Whale, minke	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
27	Whale, pilot, short-finned	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
28	Whale, pygmy killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
29	Whale, pygmy sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
30	Whale, sei	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
31	Whale, sperm	Range-wide (NMFS Endangered)	Wild	All	Male and Female	245	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
32	Whale, Stejneger's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
33	Whale, unidentified baleen	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

34	Whale, unidentified beaked	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
35	Whale, unidentified Mesoplodon	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
36	Whale, unidentified toothed	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

Location

Research Area: Pacific Ocean State: CA Stream Name: NORTH PACIFIC OCEAN OFFSHORE SOUTHERN CALIFORNIA

Sale in Oregon of species taken: None

Location Description: State & federal waters offshore Southern Calif counties: San Diego, Orange, Los Angeles, Ventura, Santa Barbara, San Luis Obispo, Monterey & Santa Cruz, including waters of and adjacent to US Navy's SOCAL OPAREA, SCORE & SCIUR ranges and Pt. Mugu complex

Take Information

Line Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Takes Per Animal	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date
1	Dolphin, bottlenose	Range-wide	Wild	All	Male and Female	690	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
2	Dolphin, common, long-beaked	Range-wide	Wild	All	Male and Female	5305	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
3	Dolphin, common, short-beaked	Range-wide	Wild	All	Male and Female	51375	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
4	Dolphin, Fraser's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
5	Dolphin, northern right whale	Range-wide	Wild	All	Male and Female	1205	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
6	Dolphin, Pacific white-sided	Range-wide	Wild	All	Male and Female	5485	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
7	Dolphin, pantropical spotted	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

8	Dolphin, Risso's	Range-wide	Wild	All	Male and Female	1250	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
9	Dolphin, rough-toothed	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
10	Dolphin, spinner	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
11	Dolphin, striped	Range-wide	Wild	All	Male and Female	1250	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
12	Dolphin, unidentified	NA	Wild	All	Male and Female	700	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
13	Porpoise, Dall's	Range-wide	Wild	All	Male and Female	65	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
14	Whale, Baird's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
15	Whale, Blainville's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
16	Whale, blue	Eastern North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	305	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
17	Whale, Bryde's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
18	Whale, Cuvier's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
19	Whale, dwarf sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
20	Whale, false killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015

21	Whale, fin	Range-wide (NMFS Endangered)	Wild	All	Male and Female	315	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
22	Whale, ginkgo-toothed beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
23	Whale, gray	Eastern North Pacific	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
24	Whale, Hubbs' beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
25	Whale, humpback	Eastern North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	345	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
26	Whale, killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
27	Whale, Longman's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
28	Whale, melon-headed	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
29	Whale, minke	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
30	Whale, pilot, short-finned	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
31	Whale, pygmy killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
32	Whale, pygmy sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015
33	Whale, sei	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, N/A behavioral; Photo-id; Photogrammetry; Photograph/Video	7/14/2010	7/31/2015

34	Whale, sperm	Range-wide (NMFS Endangered)	Wild	All	Male and Female	70	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
36	Whale, unidentified baleen	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
37	Whale, unidentified beaked	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
38	Whale, unidentified Mesoplodon	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
39	Whale, unidentified toothed	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

Location
Research Area: Pacific Ocean **States:** GU,MP **Stream Name:** WESTERN NORTH PACIFIC OCEAN OFFSHORE GUAM AND NORTHERN MARIANA ISLANDS
Sale in Oregon of species taken: None
Location Description: Federal, territorial, and commonwealth waters offshore of Guam and the Commonwealth of the Northern Mariana Islands, including waters of and adjacent to US Navy Marianas Complex.

Take Information

Line Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Takes Per Animal	Take Action	Observe /Collect Method	Procedure	Transport Record	Begin Date	End Date
1	Dolphin, bottlenose	Range-wide	Wild	All	Male and Female	65	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
2	Dolphin, common, short-beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
3	Dolphin, Fraser's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
4	Dolphin, northern right whale	Range-wide	Wild	All	Male and Female	245	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
5	Dolphin, Pacific white-sided	Range-wide	Wild	All	Male and Female	1100	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

6	Dolphin, pantropical spotted	Range-wide	Wild	All	Male and Female	135	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
7	Dolphin, Risso's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
8	Dolphin, rough-toothed	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
9	Dolphin, spinner	Range-wide	Wild	All	Male and Female	240	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
10	Dolphin, striped	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
11	Dolphin, unidentified	NA	Wild	All	Male and Female	100	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
12	Whale, Baird's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
13	Whale, Blainville's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
14	Whale, blue	Western North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
15	Whale, Bryde's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
16	Whale, Cuvier's beaked	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
17	Whale, dwarf sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
18	Whale, Eden's	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

19	Whale, false killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
20	Whale, fin	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
21	Whale, gray	Western North Pacific (Korean) (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
22	Whale, humpback	Western North Pacific Stock (NMFS Endangered)	Wild	All	Male and Female	505	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
23	Whale, killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
24	Whale, Longman's beaked	Hawaiian Stock	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
25	Whale, melon-headed	Range-wide	Wild	All	Male and Female	100	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
26	Whale, minke	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
27	Whale, pilot, short-finned	Range-wide	Wild	All	Male and Female	100	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
28	Whale, pygmy killer	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
29	Whale, pygmy sperm	Range-wide	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
30	Whale, sei	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
31	Whale, sperm	Range-wide (NMFS Endangered)	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

32	Whale, unidentified baleen	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
33	Whale, unidentified beaked	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
34	Whale, unidentified Mesoplodon	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015
35	Whale, unidentified toothed	NA	Wild	All	Male and Female	50	1	Harass	Survey, aerial/vessel	Count/survey; Incidental harassment; Observations, behavioral; Photo-id; Photogrammetry; Photograph/Video	N/A	7/14/2010	7/31/2015

NEPA Checklist

- 1) If your activities will involve equipment (e.g., scientific instruments) or techniques that are new, untested,or otherwise have unknown or uncertain impacts on the biological or physical environment , please discuss the degree to which they are likely to be adopted by others for similar activities or applied more broadly.**
- Research will not involve equipment or techniques that are new or controversial. Photo-identification (Baird et al. 2009) and acoustic recording (Helweg et al., 1990) are techniques that are well established in the literature.
- 2) If your activities involve collecting, handling, or transporting potentially infectious agents or pathogens (e.g., biological specimens such as live animals or blood), or using or transporting hazardous substances (e.g., toxic chemicals), provide a description of the protocols you will use to ensure public health and human safety are not adversely affected, such as by spread of zoonotic diseases or contamination of food or water supplies.**
- Research does not involve collecting, handling, or transporting hazardous substances, infectious agents or pathogens, or biological specimens.
- 3) Describe the physical characteristics of your project location, including whether you will be working in or near unique geographic areas such as state or National Marine Sanctuaries, Marine Protected Areas, Parks or Wilderness Areas, Wildlife Refuges, Wild and Scenic Rivers, designated Critical Habitat for endangered or threatened species, Essential Fish Habitat, etc. Discuss how your activities could impact the physical environment, such as by direct alteration of substrate during use of bottom trawls, setting nets, anchoring vessels or buoys, erecting blinds or other structures, or ingress and egress of researchers, and measures you will take to minimize these impacts.**
- Research may take place within the boundaries of National Marine Sanctuaries in Hawai`i, the Gulf of Mexico, and off both the east and west coasts of the U.S. In Hawai`i waters research may also take place within the boundaries Papahanaumokuakea Marine National Monument in the Northwest Hawaiian Islands. This may be within endangered Hawaiian monk seal critical habitat (see NMFS map, attached with References), however no proposed activity will impact the Hawaiian monk seal. No proposed activity will impact the physical environment in any of these protected areas, nor will the substrate will be altered.
- 4) Briefly describe important scientific, cultural, or historic resources (e.g., archeological resources, animals used for subsistence, sites listed in or eligible for listing in the National Register of Historic Places) in your project area and discuss measures you will take to ensure your work does not cause loss or destruction of such resources. If your activity will target marine mammals in Alaska or Washington, discuss measures you will take to ensure your project does not adversely affect the availability (e.g., distribution, abundance) or suitability (e.g., food safety) of these animals for subsistence uses.**
- None of the research will affect sites listed in or eligible for listing in the National Register of Historic Places. All of the research will take place aboard a research vessel at sea or an aircraft, or on the sea floor away from any underwater archaeological sites.
- 5) Discuss whether your project involves activities known or suspected of introducing or spreading invasive species, intentionally or not, (e.g., transporting animals or tissues, discharging ballast water, use of equipment at multiple sites). Describe measures you would take to prevent the possible introduction or spread of non-indigenous or invasive species, including plants, animals, microbes, or other biological agents.**
- It is not anticipated that the planned activities will involve unintentional transport of biological materials from one area to another.

Project Contacts

Primary Contact:	Joseph Mobley Jr. 2528 McCarthy Mall Honolulu, HI 96816 Phone: (808)956-2805 Email: jmobley@hawaii.edu
Principal Investigator:	Joseph Mobley Jr.
Other Personnel:	
Name	Role(s)
Kristen Ampela	Co-Investigator
Mark Deakos	Co-Investigator
Annie Douglas	Co-Investigator
Dan Engelhaupt	Co-Investigator
Dagmar Fertl	Co-Investigator
Gregory Fulling	Co-Investigator
LORI MAZZUCA	Co-Investigator
Aliza Jean Milette	Co-Investigator
Lora L.N. Reeve	Co-Investigator
Mari Smultea	Co-Investigator
Robert Uyeyama	Co-Investigator

Attachments

- Application Archive** - P14451T14Issued.pdf (Added Jul 20, 2010)
- Contact** - Annie Douglas: C14104T5CV Douglas.pdf (Added May 25, 2010)
- Contact** - Annie Douglas: C8748T5Annie Douglas CV.doc (Added Mar 9, 2011)
- Contact** - Dagmar Fertl: C14402T5Dagmar Fertl CV.docx (Added Jul 28, 2010)
- Contact** - Dan Engelhaupt: C7596T5EngelhauptCV 2009.doc (Added Jul 29, 2009)
- Contact** - Gregory Fulling: C14401T5Greg Fulling CV.DOC (Added Jul 28, 2010)
- Contact** - Joseph Mobley Jr.: C7359T5CURRICULUM VITAE_ JOSEPH R.pdf (Added Jul 3, 2009)
- Contact** - Kristen Ampela: C14403T5Kristen Ampela CV.DOC (Added Jul 28, 2010)
- Contact** - Lora L.N. Reeve: C12896T5LLNReeve_law_resume_6-22-09.pdf (Added Jul 14, 2009)
- Contact** - Lora L.N. Reeve: C12896T5LLNReeveCV.7.02.09.pdf (Added Jul 14, 2009)
- Contact** - LORI MAZZUCA: C13184T5LMazzuca_CV_2009.pdf (Added Jul 3, 2009)
- Contact** - Mari Smultea: C11652T5Smultea_Mar_Mam_resume_July_09.pdf (Added Jul 7, 2009)
- Contact** - Mark Deakos: C13185T5DeakosCVApr2009Joe.pdf (Added Jul 7, 2009)
- Contact** - Mark Deakos: C6663T5DeakosCVNov2009.pdf (Added Jan 26, 2011)

Contact - Robert Uyeyama: C6665T5ResumeRobertUyeyamaPhD.pdf (Added Sep 6, 2009)

Lit Review - P14451T7_NOISE-REVIEW.pdf (Added Sep 24, 2009)

Lit Review - P14451T7_STATUS OF POTENTIALLY AFFECTED SPECIES BY OCEAN BASIN.pdf (Added Sep 6, 2009)

Location - L25666T3_TakeLocationMHI-NWHI.pdf (Added Sep 24, 2009)

Location - L26120T3_TakeLocationAtlantic.pdf (Added Sep 29, 2009)

Location - L26378T3_TakeLocationPacificNW.pdf (Added Sep 24, 2009)

Location - L26379T3_TakeLocationPacificSOCAL.pdf (Added Sep 24, 2009)

Location - L26380T3_TakeLocationGUAM-MI.pdf (Added Sep 24, 2009)

Project Description - P14451T1_expectedtakescomputed.xls (Added Sep 24, 2009)

Project Description - P14451T1monk seal_CH.pdf (Added Jul 14, 2009)

References - P14451T12_PERMIT-REFERENCES.pdf (Added Sep 24, 2009)

Resources Needed - P14451T15_Resources.pdf (Added Sep 22, 2009)

Status

Application Status:	Application Complete		
Date Submitted:	September 8, 2009		
Date Completed:	October 18, 2009		
FR Notice of Receipt Published:	November 12, 2009	Number:	0648-XS81
Comment Period Closed:	December 12, 2009	Comments Received:	Yes Comments Addressed: Yes
Last Date Archived:	March 9, 2011		

- MMPA/ESA Research/Enhancement permit
 - Current Status: Issued Status Date: July 14, 2010
 - Section 7 Consultation: Formal Consultation
 - NEPA Analysis: Environmental Assessment
 - Date Cleared by General Counsel: July 14, 2010
 - FR Notice of Issuance/Denial Published: July 23, 2010 Notice Number: 0648-XX69
 - Expire Date: July 31, 2015
 - Analyst Information:
 - 1) Kristy Beard Phone: (301)713-2289 Ext: 192
Email: kristy.beard@noaa.gov
 - 2) Joselyd Garcia Reyes Phone: (301)713-2289 Ext: 201
Email: Joselyd.Garcia.Reyes@noaa.gov

Modification Requests

Modifications Requested						
Number	Title	Description	Status	Date Submitted	Date Issued	Issued Version
1	BBC filming authorization request	I am writing to request permission to work with a BBC film crew for the purpose of filming spinner dolphins along the Kona coast of the island of Hawaii. Filming, both topside and underwater, will take place during a seven day period from Nov. 8-14, 2010. This work will involve collaboration with Dr. Frank Fish from West Chester University. His research has focused on the hydrodynamics of vertebrates and he is specifically interested in studying the spinning behavior of spinner dolphins. This research fits nicely with our own historical interest in the distribution and behavior of marine mammals in Hawaiian waters, including spinner dolphins. Either I or one of my designated co-investigators will be present at all times and ensure that all conditions of the permit are adhered to.	Issued	10/12/2010	10/19/2010	P14451T14Mod1.pdf
2			Draft			
3	Co-Investigator Addition	Request the addition of Aliza Milette as a co-investigator (CI) to my permit #14451	Issued	10/14/2010	10/15/2010	P14451T14Mod3.pdf
4	Add Annie Douglas	Add Annie Douglas for all activities	Issued	02/25/2011	03/09/2011	

Reports

Reports Required						
Nbr	Report Type	Report Period		Date Due	Status	Date Received
		Start Date	End Date			
1	Annual	07/14/2010	07/31/2011	10/31/2011	N/A	
2	Annual	08/01/2011	07/31/2012	10/31/2012	N/A	
3	Annual	08/01/2012	07/31/2013	10/31/2013	N/A	
4	Annual	08/01/2013	07/31/2014	10/31/2014	N/A	
5	Annual	08/01/2014	07/31/2015	10/31/2015	N/A	
6	Final	07/14/2010	07/31/2015	01/31/2016	N/A	
7	Incident				Submitted	03/02/2011